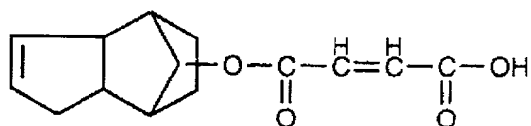


were weighed out into a stirring flask equipped with heater and reflux condenser. The mixture was heated to 125°C under a gentle stream of nitrogen. Then

5 95.00 g of water (5.0 mol + 5 g)

were added from a dropping funnel over the course of one hour. The mixture was allowed to react at 125°C for one hour. The monocarboxylic acid V was formed.

10



Preparation example 2

15 The preparation of a polyester (B1) containing structural units II and fumaric ester groups in the main chain

240.00 g of dicyclohexanolpropane (1 mol),
20 236.00 g of 1,6-hexanediol (2 mol),
194.00 g of dimethyl terephthalate (1 mol), and
0.67 g of tin acetate

were weighed out into a stirred flask equipped with
25 heater and top-mounted distillation attachment. The

mixture was heated rapidly to 120°C under a gentle stream of nitrogen. Then the temperature was raised in stages to 190°C over the course of 3 hours, during which the water of condensation formed was removed by
5 distillation.

The contents of the flask were cooled to 90°C and then the following were added:

- 10 516.80 g of precursor 1 (2 mol),
116.00 g of fumaric acid (1 mol),
4.00 g of dibutyltin dilaurate, and
0.50 g of hydroquinone.

- 15 The mixture was heated rapidly to 130°C under a gentle stream of nitrogen, then the temperature was raised gradually to 190°C over the course of 6 hours, during which the water of condensation formed was removed by distillation.

20

This gave the polyester (B1) having an acid number of 17, which solidified on cooling and gave non-caking powders on grinding.

Preparation example 3

The preparation of a polyester (B2) without structural units I and/or II but with fumaric ester groups in the
5 main chain

240.00 g of dicyclohexanolpropane (1 mol),
236.00 g of 1,6-hexanediol (2 mol),
194.00 g of dimethyl terephthalate (1 mol), and
10 0.67 g of tin acetate

were weighed out into a stirred flask equipped with heater and top-mounted distillation attachment. The mixture was heated rapidly to 120°C under a gentle
15 stream of nitrogen. Then the temperature was raised in stages to 190°C over the course of 3 hours, during which the water of condensation formed was removed by distillation.

20 The contents of the flask were cooled to 90°C and then the following were added:

146.00 g of adipic acid (2 mol),
116.00 g of fumaric acid (1 mol),
25 4.00 g of dibutyltin dilaurate, and
0.50 g of hydroquinone.